

4200

RECORD
COPY

MAIN FILE

MAIN FILE

JPRS: 4200

21 November 1960

ALL-UNION CONFERENCE OF AGRICULTURAL SPECIALISTS

Unsigned

- USSR -

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

REMOVED TO MAIN FILE

Distributed by:

OFFICE OF TECHNICAL SERVICES
U. S. DEPARTMENT OF COMMERCE
WASHINGTON 25, D. C.

Reproduced From
Best Available Copy

U. S. JOINT PUBLICATIONS RESEARCH SERVICE
1636 CONNECTICUT AVENUE, N. W.
WASHINGTON 25, D. C.

19990730 049

FOREWORD

This publication was prepared under contract by the UNITED STATES JOINT PUBLICATIONS RESEARCH SERVICE, a federal government organization established to service the translation and research needs of the various government departments.

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 08-01-2001 BY 104

JPRS: 4200

CSO: 1156-S

ALL-UNION CONFERENCE OF AGRICULTURAL SPECIALISTS

-USSR-

[Following is the translation of an article entitled "Vsesoyuznoye Soveshchaniye spetsialistov sel'skogo khozyaystva" (English version above), unsigned, in Zashchita rasteniy ot vreditel'ey i bolezney (Plant Protection against Blights and Diseases), Vol 5, No 8, Moscow, August 1960, pages 1-5.]

In the Large Kremlin Palace

Here, in accordance with an old tradition, are held meetings of high government significance: party congresses, sessions of the Supreme Soviet, festive meetings devoted to significant events, and other forums of large social and political interest.

This time (14-18 June), there assembled in this palace the most eminent practitioners of the agricultural sciences and practices -- scientists, agronomists, land exploitation organizers, engineers, machine operators, foresters, zootechnicians, and the foremost people in agriculture, animal husbandry, and agricultural mechanization.

Among them are those gray with age and young production innovators; the heads of scientific institutions, kolkhozes, sovkhoses, leskhozoes, and tractor repair stations; specialists in plant protection; and many other celebrated and rank-and-file workers whose labor, knowledge, and experience have been marked with concrete achievements in agriculture.

This conference of specialists, convened by the Ministry of Agriculture USSR on instructions from the Central Committee of the CPSU and the Council of Ministers USSR, is the largest in post-war years and marks an event in the life of the country. It signifies in itself a new step in concretely putting into practice one of the most important assignments of the Seven-Year Plan -- a further increase in the amount of agricultural crops and an increase in the fertility of fields and the productivity of livestock.

The main theme of the conference is the introduction into production of a scientifically based system of agriculture and system of machines.

Many of its theoretical propositions were worked out earlier by Soviet scientists, but the basic problems received a sharp and vitally practical elucidation in the decisions of the Communist Party beginning in 1953 and also in the addresses on agriculture of N. S. Khrushchev. In particular, this concerns the question of the mistakes made in

applying the grassland system of agriculture. In theory and practical application, the grassland system did not take into account the natural, climatic, and economic-organizational conditions of individual agricultural zones. The unoriginality of this system is one of its main shortcomings.

It is appropriate here to recall the saying "everything in good season" -- however well that may be established for this or that theory for an agricultural system, it gains practical significance when there are real possibilities for putting it into practice.

Now, as at no earlier time, all the necessary material and organizational prerequisites are ready for the practical introduction into production of a scientifically based system of agriculture and, consequently, the opportunity has been opened up for mobilizing new reserves to further increase the productivity of agriculture and animal husbandry.

At the December (1959) Plenum of the Central Committee of the CPSU, Comrade N. S. Khrushchev said: "Now having splendid cadres, we must expand not only in width but in depth in the agricultural area; not only by way of increasing areas under grain crops, but also by way of increasing the harvests by introducing better agronomy techniques. We must make efforts to obtain higher labor productivity, to lower the costs of production. Not extensive forms of agriculture, based predominantly on the expansion of crops, but a highly qualified, intensive agriculture, which will produce the maximum amount of products from each hectare of land, for each unit of labor invested -- here is our road".

The introduction of a scientifically based system of agriculture by zones is just the road which will permit us to reach our established goals in the near future.

This is why the heads of the governmental organs of our country have placed such important significance on the convocation of the All-Union Conference of Agricultural Specialists.

The very fact of the convocation of this conference, said Comrade Matskevich, Minister of Agriculture USSR, in his address, reflects the Leninist style of activity of the Central Committee of the Party and the Soviet government -- to be guided by collective experience, and to attract to the discussion of the most important state problems a wide circle of practical workers, specialists, and scientists.

The following figures show just how large this circle is. More than 2,500 delegates representing all zones of the country have taken part in this conference.

Also, delegates of agricultural workers from a number of countries in the socialist camp were present: the people's Republic of Bulgaria, the People's Republic of Hungary, the People's Republic of Poland, the People's Republic of Rumania, the Czechoslovak People's Republic, the Chinese People's Republic, the People's Republic of Albania, the German Democratic Republic, the Korean People's Democratic Republic, and the People's Republic of Mongolia.

The Presidium of the Central Committee of the CPSU, headed by Nikita Sergeyevich Khrushchev, was elected the honorary presidium of the Conference.

The participants in the conference greeted with thunderous applause the appearance of Party and State Leaders in the presidium of the conference.

V. V. Matskevich addressed the conference with a speech entitled "On the Introduction into Production of a Scientifically Based System of Agriculture and a System of Agricultural Machinery as the most Important Condition for the Further Development of the Productive Forces in Agriculture."

He mentioned that this is the first time that a conference of agricultural specialists has been held with such a large number of members, and recalled the instructions of Vladimir Il'ich Lenin: "Promote more engineers and agronomists, instruct them, examine their work, and convert congresses and conferences...into organs for examining agricultural achievements, into organs where we will be able to teach agricultural construction according to present day views."

Having indicated that the conference is being held in a significant period, when the Soviet Union is entering an era of extensive communist construction, Comrade Matskevich reviewed the achievements which our country obtained in the field of agriculture during the past period and whose beginning was initiated by the September Plenum of the Central Committee of the CPSU in 1953.

Based on these achievements, he said, the 21st Party Congress determined that in the current Seven-Year Plan the basic task is obtaining a level of production which will allow the needs of the population to be fully satisfied as regards food-stuffs and the needs of industry for raw materials, and to provide all the other needs of the state for agricultural products.

In order to create an abundance of products we must elevate agriculture to a new, higher level; distribute agricultural production by zones by the best possible method, and try to obtain stable crops independently of the influence of unfavorable elemental forces of nature.

Practice shows, says Comrade Matskevich, that one of the most important conditions for the successful fulfillment of this task is the detailed calculation of the natural and economic peculiarities of each region and type of agriculture in particular. This has especially great significance in our vast country with its diverse climatic, soil and economic conditions. V. I. Lenin said: "...Agriculture in the Kaluzhskaya Guberniya is not that of the Kazanskaya... Not to take into account all these problems of local differences would mean sinking into bureaucratic centralism, would mean interfering with the local workers' calculation of local differences as regards what is the basically reasonable work."

The scientifically based system of agricultural production is thus called upon to bring about the achievement of the above-mentioned goals.

This system, Comrade Matskevich further explained, represents a complex of inter-dependent, elaborated measures tested by science and advanced practice, the realization of which in a given type of agriculture and in a given specific zone (taking into account all their natural and economic conditions), permits a high level of production per unit of land area in conjunction with the least expenditure of labor and other resources.

Plant protection from diseases and blights is one of the most important elements of an agricultural system. In our country, Comrade Matskevich said, measures for protecting the harvest have continuously increased in scope. The suppression of breeding grounds from which locusts spread, the sharp curtailment of cotton crop losses from the spider mite and sugar beets from the weevil must be considered a large-scale success. But for all this, still not enough attention is being given to the business of crop protection by agronomists and farm managers.

The organization of the state plant protection service, consisting of oblast complex experimental stations, has been effected by a decree of the government. Such a service must give a prognosis of possible outbreaks of diseases and the appearances of blights and must render systematic aid to kolkhozes and sovkhoses in preventing and combating plant blights and diseases. Special sections under oblast experimental stations and, in necessary cases, operational detachments must be created which are equipped with the technical means for protecting crops and plants against blights and diseases.

The minister mentioned that the organization of the state plant protection service in a number of oblasts is proceeding very slowly and considers this completely intolerable. The underestimation of so important a measure, he said, may lead to serious consequences. Scientific institutions must strengthen theoretical research in the biology of different types of blights and to find more perfect methods of combatting them.

In the latter part of his report Comrade Matskevich spoke about problems of mechanization, animal husbandry, improving the veterinary service, technical progress, raising labor productivity, and the perfection of agricultural management.

In conclusion, he expressed confidence that the army of many millions of agricultural specialists educated by the Communist Party will use all their power, knowledge, and experience in successfully carrying out these honorable and responsible tasks -- to promote the further raising of productive forces in our country and the fulfillment of the Seven-Year Plan tasks ahead of schedule.

The following Ministers of Agriculture addressed the conference with reports on their experience in working out and introducing a scientifically based system of agriculture by zones: of the RSFSR, G. L. Smirnov; of the Ukrainian, M. S. Spivak; of the Belorussian SSR, M. N. Lutsenko; of the Kazakh SSR, A. I. Kozlov; and of the Uzbek SSR, D. Kh. Khanazarov.

Speaking on the tasks of introducing the agricultural system in irrigated and bog land and in desert pasturelands, Comrade Khanazarov mentioned the necessity of using more widely in these conditions chemical means of combating blights, diseases, and weeds, and also for the defoliation of cotton plants.

A large number of workers took part from their seats in debates at plenary sessions. Many of them devoted significant attention to the problems of plant protection.

I. F. Buzanov, director of the All-Union Scientific Research Institute for Sugar Beets, told about the achievements of Soviet selectionists who created a type of single-sprout sugar beet. Science has at its disposal an assortment of very effective preparations to combat blights in this crop -- polychlorpinene, heptachlorine, and others. The task consists in the better production of these remedies and a broader introduction of them into production. For the single-sprout crop of sugar beets there is an especially acute need for herbicides against weedy vegetation and chemical preparations for protection against dangerous blights and diseases.

V. M. Vazalinskas, Minister of Agriculture Lithuanian SSR, indicated in his address that under Lithuanian agricultural conditions the fight against blights and diseases in agricultural plants and against weeds has an exclusively important significance in creating a durable fodder base for animal husbandry and appears to be an indispensable condition for the further development of fruit-growing.

B. V. Glushko, chairman of the "Vyatsa noue" Kolkhoz of the Moldavian SSR, considers that plant protection is an important reserve for increasing the gross yields of agricultural products but, unfortunately, he mentioned that the achievements of science in this connection are being poorly introduced.

E. N. Modin, director of the "Lyubanskiy" Sovkhoz in the Belorussian SSR, in his speech, citing the experience gained on the farm which he directs, called for a broader application of herbicides for the sowing of crops and the use of pyrite cinders not only as a fertilizer, but also as an effective agent against potato phytophthora.

A. I. Zadontsev, director of the All-Union Scientific Research Institute for Corn, spoke on the effectivity of TMTD [unidentified], granozane, and a number of other preparations against many diseases and blights in corn crops. He said that the all-inclusive study of blights and diseases and the means of combating them will permit a sharp increase in the gross yields in agricultural crop harvests.

V. V. Matskevich, Minister of Agriculture USSR, made the concluding statement at the conference: the conference has adopted the appeal to agronomists, zootechnicians, land exploitation organizers, engineers, veterinary physicians, economists, technicians, mechanics, and all agricultural specialists. The appeal indicates that great harm is done to agriculture by weeds and diseases and blights in agricultural crops. This evil must be liquidated. The time has come to direct all forces and means which are at the disposal of science and advanced experience

to the struggle against weeds, blights and plant diseases.

In the Timiryazev Academy of Agriculture (Plant Protection Section)

The work of the Plant Protection Section of the All-Union Conference of Agricultural Specialists took place in one of the large auditoriums of the academy on 15-16 June.

Eminent scientists from all the union republics were present -- academicians, professors, doctors and candidates of sciences; agronomists of kolkhozes, sovkhozes, tractor repair stations, rayon agricultural inspection stations, reporting and forecasting service, detachments, expeditions, the quarantine service, and the agricultural aviation service; engineers from the GSKB (Gosudarstvennoye spetsial'noye konstruktorskoye byuro -- State Special Design Bureau) and others, a total of 167 people.

The work of the section was managed by a bureau whose staff included: V. V. Kosov (chairman), chief of the State Inspectorate for Quarantine and Plant Protection, Ministry of Agriculture USSR; A. F. Chenkin, chief of the Administration of Plant Protection, Ministry of Agriculture RSFSR; N. N. Arkhangel'skiy and N. S. Shcherbinovskiy, corresponding members of VASKhNIL (Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V. I. Lenina -- All-Union Academy of Agricultural Sciences imeni V. I. Lenin); Prof D. L. Tverskoy; and B. V. Yakovlev, Scientific Secretary of the Coordinating Council for Plant Protection, Agricultural Department of VASKhNIL.

Three reports and 16 co-reports were heard and discussed.

V. V. Kosov in his report outlined the contemporary status of the plant protection services and mentioned their basic tasks -- aiding kolkhozes and sovkhozes on the basis of contemporary achievements of science and advanced experience in liquidating agricultural crop harvest losses from blights, diseases, and weeds.

I. A. Churayev (Deputy Chief of the State Inspectorate for Quarantine and Plant Protection, Ministry of Agriculture USSR) devoted a report to the contemporary status and tasks of plant quarantine. He said that the realization of quarantine measures will contribute much to increasing the production of agricultural products and to the fulfillment of the Seven-Year Plan ahead of schedule. Together with this, the role and significance of plant quarantine will grow still more in conjunction with the expansion of the USSR's trade, scientific, and cultural contacts with foreign countries.

Ye. M. Shumakov, Deputy Director of the Scientific Part of the VIZR (Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rasteniy -- All-Union Scientific Research Institute of Plant Protection) reported on the tasks of science. He particularly mentioned the necessity of concentrating the forces of scientific-research institutes on the further elaboration of the problems of immunity; the biological, biophysical, agrotechnical, and chemical methods of protection; strengthening connections with production; and the most rapid possible introduction into practice of existing achievements in science and advanced experience and their widespread propagandizing.

Co-reports were devoted to individual problems in plant protection. P. V. Sazonov elucidated the ways of developing the chemical method; N. A. Shipinov discussed the outlook for the chemical method in the fight against weeds; N. K. Tarnovich and G. I. Korotkikh presented co-reports on plant protection mechanization; S. G. Starostin reported on the status and outlook of aviation chemical methods; S. V. Andreyev spoke on achievements in biophysics; N. A. Telenga presented a co-report on the biological method; N. S. Shcherbinovskiy reported on the influence of solar radiation on the mass reproduction of blights; Z. I. Ivanova spoke on the methods of combating granary blights.

F. Ye. Nemliyenko, Ye. V. Klokova, P. I. Susidko, and I. D. Shapiro threw light on the basic measures and tasks in protecting corn in its new and old cultivation regions; T. G. Grigor'yeva reported on the protection of grains in a virgin soil utilization zone; K. Ya. Kalashnikov threw light on the problems of protecting grains from diseases in the seed growing system; V. P. Vasil'yev explained the complex methods of combating the garden beet weevil; and N. A. Dorozhkin and L. T. Yatsyna spoke on the protection of potatoes from blights and diseases.

In all, 24 participants in the section took part in the lively discussions.

Academician Ye. N. Pavlovskiy spoke on the participation of the scientific institutions of the Academy of Sciences USSR and of the union republics in working out plant protection problems. The ZIN (Zoologicheskii institut — Zoological Institute) in cooperation with the VIZR, he said, has put out a reference work on insects which damage corn and he mentioned the publication of a work on regional determinants of insects and fauna by individual republics. It is necessary to strengthen this work and devote more attention to the study of the fauna of weed and wild flowers, which will have large practical significance. A study of the natural breeding ground of human and animal diseases can also be expanded to a similar study as regards plant blights and diseases.

Prof I. Ya. Polyakov gave a report on the problems of the reporting and forecasting service. Speaking on forecasting the development of the most important blights and diseases in the next few years, he directed attention to the necessity of a further expansion of the reporting and forecasting service and the need for all scientific plant protection institutes and experimental sorting sections to participate in it. He said that it is necessary to consider more quickly the project worked out by the VIZR for the organization of the reporting and forecasting service.

Prof B. P. Dobrovol'skiy spoke on the ways of liquidating wireworms [larva of the click beetle] as mass blights, on the possible sharp lowering of expenditure norms of GKhtsG [unidentified] (from 100 to 1.5 kilograms per hectare), applying it in a mixture with granulated superphosphate; and on the necessity of working out zonal systems of measures for combating the wireworm and the participation in this work of a larger number of research institutes and higher technical schools (about 50 organizations have already been included). He spoke out for

the expediency (in the future) of reorganizing the plant protection sections which have now been created in oblast complex experimental stations, into independent plant protection stations.

Prof D. D. Verderevskiy reported on the organization of plant protection in Moldavia. He said that now in the republic there is a specialist (an agronomist or technician) in plant protection in each sovkhos or kolkhoz, and the responsibility for carrying out the necessary measures to combat diseases and blights is invested in the farms themselves. A reporting and forecasting service has been created in each rayon which, besides its own basic functions, also assures state control over the fulfillment of obligatory measures by the farms. The need to create an institute of plant protection in the Moldavian SSR has come to a head.

S. T. Starostin mentioned that during the last 10 years the participation of aviation in plant protection increased almost 10 times and constitutes 44 percent of the total volume of chemical protection. In the next few years this volume is expected to increase again twofold. Spraying will be the basic protection method, with small expenditure norms for liquid agents and aerosols. It will be necessary to synthesize new, more effective preparations for spraying by airplane. The problem of creating special airplanes and helicopters for agricultural needs has now become paramount.

K. Ya. Kalashnikov (Pushkin Base of the VIZR) spoke on the combined treatment of seeds with copper sulfate or another fungicide; the organization of the thermal type of this treatment against grain smuts, -- first in experimental stations and in seed growing farms; and on the wide introduction, beginning in 1961, of the semi-dry method of this treatment on grains and the necessity of creating a moistening agent for this work.

Academician N. A. Dorozhkin (Academy of Agricultural Sciences Belorussian SSR) spoke out for the preservation, for the time being, of oblast plant protection stations for Belorussian conditions instead of the projected complex agricultural experimental stations. He subjected to criticism the work of the VIZR in potato phytophthora resistance being carried out in Leningrad and spoke out for the advisability of concentrating deep theoretical and practical research in those zones where this problem has the greatest significance.

Honored Agronomist of the Uzbek SSR I. R. Kostenko dwelt on the organization of plant protection in the Uzbek SSR and the problems of blight and disease prevention. He reported that the operational work in combating blights, diseases, and weeds in the republic is the main concern of the oblast plant protection stations, which have been set up under the oblast agricultural administrations, and that the republic budget provides for a plant protection agronomist in each rayon; there are also specialists of this type on all farms. In Uzbekistan, the centralized fungicidal treatment of cotton seeds is being successfully conducted, as is the prophylactic spraying of weed vegetation and mulberry trees which surround crops and, by way of wide production experience, the prophylactic

treatment of cotton plants against the spider mite and cotton-ball worm. It is necessary, he said, to search for more effective agents than carbolineum, hexachlorane, and other chemical agents for treating weeds and crops in preventing their contamination from the boll weevil (korobochnik), gommoz [unidentified], crown rot and other blights and diseases. The problem of combating the wilting of cotton plants must be more quickly resolved.

Prof V. P. Izrail'skiy spoke on the serious damage inflicted on grain crops, potatoes, corn, fruit, and other crops by bacterial diseases and the necessity of strengthening research work in this area.

I. F. Snegovskiy directed the attention of the participants in the section to the necessity of eliminating parallelism in the designing of special machines and in decreasing the number of their models. G. R. Ibragimov of AzIZR (Azerbaijdzhan Institute for Plant Protection) dwelt on the problems of combating the cotton-ball worm and the wilting of cotton plants.

Prof M. S. Dunin spoke on the necessity of including in all zonal, scientifically based systems of agriculture obligatory plant protection measures. He said that biological and agrotechnical measures must occupy a larger place in production and research work. A further improvement in the quarantine service is required in order to decrease potato-canker and nematode areas and other quarantine objectives. The time has come to strengthen the training of cadres in plant protection by opening faculties and departments in a number of higher educational institutions of agriculture.

V. I. Belizin, chief of the OBV (Otdel bor'by s vreditelyami sel'skogo khozyaystva -- Agricultural-Pest Control Section) of the Kurskaya Oblast Agricultural Administration shared his experience in combating wireworms infesting corn crops in the oblast. Here small doses of hexachlorane (1.5-2 kilograms per hectare) are introduced over large areas simultaneously with the sowing of corn and a good effect is obtained. Corn, sugar beet, and other crop losses from blights has noticeably decreased in the oblast during the last few years. However, there are still shortages in poisons, especially GKhtsG [unidentified]. Comrade Belizin spoke out for the advisability of creating oblast plant protection stations in the oblast after the example of Uzbekistan.

M. I. Prokhorov (Institute of Agricultural Microbiology, Leningrad) discussed the microbiological method of combating mouse-type rodents with which the institute has been occupied since 1951; this method is now being successfully applied in production. A method has been worked out for obtaining microbiological agents in solid granulated substances. The biological industry must organize the mass production of these cultures.

G. Kh. Azaryan (Armenian IZR) reported that a large department of plant protection with 94 staff units has been created in the IZR in accordance with the decree of the government; this department will head all work in the republic in combating blights, diseases, and weeds. Agronomist positions in plant protection are being created in all rayons

with funds from the republic budget. The direct execution of the work is invested in the farms, in which detachments or brigades have been set up for this purpose. Bases of the OZR of the institute have been organized in nine zones of the republic, in which there is also a reporting and forecasting service. A strengthening of scientific research work in this field is also contemplated.

Academician V. P. Vasil'yev (Ukrainian IZR) said that many elaborated scientific measures are being poorly put into effect. The reorganization of the plant protection services is reuniting science with practice and, undoubtedly, will accelerate the introduction of achievements in science and advanced experience into production.

A. D. Sokolov (Leningrad Inspectorate) spoke out for the quickest possible approval of quarantine service regulations and provisions for the domestic quarantine of plants. He indicated the necessity for the construction facilities at frontier quarantine points for the disinfection of vegetable shipments.

O. R. Tril' (Cherkasskaya Oblast Agricultural Administration) mentioned that plant protection measures are being carried out on a broader scale in the oblast but that there are still shortages of poison chemical agents, spare parts, and apparatus. Agricultural blight control detachments still are not proving their value. Apparatus and chemical preparations are still needed in each farm and, in each rayon agricultural inspectorate, plant protection agronomists for management and control realization are needed.

A. A. Martirosov (Quarantine Inspectorate of the Uzbek SSR) spoke on the need to strengthen work in biological control methods against quarantine blights, the expansion of the scale of treatment against the Comstock mealybug, and raising the quarantine requirements for farms and, especially of scientific organizations, which in part bring quarantined objects into the country.

S. V. Andreyev, K. A. Gar, K. P. Grivanov, Z. V. Ivanova, and G. I. Korotkikh also took part in the discussions.

In its concluding work the section unanimously accepted a resolution in which was mentioned that the conference considers necessary and obligatory the inclusion of measures to combat blights, diseases, and weeds in the scientifically based zonal systems of agricultural management.

The conference concluded that the realization of measures for strengthening the state plant protection service in a number of oblasts and republics was being dragged out intolerably and turned to the Ministers of Agriculture of the Union Republics and to the heads of oblast agricultural organs with the request to carry out all work in creating this service during 1960-1961.

The conference approved and recommended that the following be presented for study to the Ministry of Agriculture USSR: "Proposition Concerning the State Service for the Protection of Plants against Blights, Diseases, and Weeds," "Proposition Concerning the State Service for Reporting and Forecasting the Appearance of Blights and Plant Diseases," and "Regulations for the Quarantine Service."

In regard to the regionalization of new varieties of agricultural crops, the conference considered it necessary to ask the Ministry of Agriculture USSR to include among the number of basic agricultural indices the degree of resistance of a variety to the diseases most dangerous to a given crop.

The conference mapped out the basic directions of scientific research work in plant protection and spoke out for the advisability of organizing special plant protection institutes in all union republics, first of all in the RSFSR.

It mentioned that plant protection mechanization is lagging behind the contemporary level of agricultural development in the country, in connection with which it is necessary to strengthen work in creating more perfect and productive types of tractor, aviation, and manual apparatus, to increase the production of machines and spare parts, and to lower their costs.

In order to conduct work in combating blights, diseases, and weeds on a high level, the conference recommends the expansion of the training of specialist cadres, establishing for this purpose faculties of plant protection in TSKhA (Sel'skokhozyaystvennaya akademiya imeni K. A. Timiryazova -- Agricultural Academy imeni K. A. Timiryazov) and the Saratov Agricultural Institute and to organize courses for raising specialist qualifications in plant protection at the Leningrad, Khar'kov, and Velikolukskiy SKhI and TSKhA.

For purposes of plant protection propaganda, the conference considers necessary the expansion of the publication of special popular and scientific literature -- reference works, brochures, leaflets, posters, and recognition manuals.

The conference requested the Ministry of Agriculture USSR to convene in 1961 the All-Union Conference of Plant Protection Specialists for the purpose of working out proposals and recommendations concerning the most urgent problems in combating blights, diseases, and weeds.